

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
CIVIL MINUTES—GENERAL

Case No. **EDCV 11-3397 JGB (RZx)**

Date December 8, 2017

Title ***Kaneka Corp. v. SKC Kolon PI, Inc. et al.***

Present: The Honorable **JESUS G. BERNAL, UNITED STATES DISTRICT JUDGE**

MAYNOR GALVEZ

Deputy Clerk

Not Reported

Court Reporter

Attorney(s) Present for Plaintiff(s):

None Present

Attorney(s) Present for Defendant(s):

None Present

Proceedings: Order (1) DENYING Defendants' Motion for Judgment as a Matter of Law, or in the Alternative, A New Trial (Dkt. No. 750); (2) DENYING Defendants' Provisional Motion Pursuant to Rule 52 of the Federal Rules of Civil Procedure (Dkt. No. 751); (3) DENYING Defendants' Motion to Tax Costs against Plaintiff (Dkt. No. 765); (4) DENYING Plaintiff's Motion for a Permanent Injunction (Dkt. No. 757); and (5) GRANTING IN PART and DENYING IN PART Plaintiff's Application to Tax Costs (Dkt. No. 742)

Before the Court are five post-trial motions: (1) Defendants' Motion for Judgment as a Matter of Law, or in the Alternative, A New Trial ("JMOL," Dkt. No. 750"); (2) Defendants' Provisional Motion pursuant to Rule 52 of the Federal Rules of Civil Procedure ("PM," Dkt. No. 751); (3) Defendants' Motion to Tax Costs against Plaintiff ("DMTC," Dkt. No. 765); (4) Plaintiff's Motion for a Permanent Injunction ("MPI," Dkt. No. 757); and (5) Plaintiff's Application to Tax Costs against Defendants ("PMTTC," Dkt. No. 742). For the foregoing reasons, the Court:

1. DENIES Defendants' Motion for Judgment as a Matter of Law;
2. DENIES Defendants' Provisional Motion;
3. DENIES Defendants' Motion to Tax Costs;
4. DENIES Plaintiff's Motion for a Permanent Injunction; and
5. GRANTS IN PART and DENIES IN PART Plaintiff's Application to Tax Costs.

I. BACKGROUND

A. Procedural Posture

On July 26, 2010, Plaintiff Kaneka Corporation (“Kaneka” or “Plaintiff”), a Japanese corporation, filed this patent-infringement action against Defendants SKC Kolon PI, Inc. (“SKPI”), a Korean corporation, and SKC, Inc. (“SKC”), a United States corporation (collectively, “Defendants”). (“Complaint,” Dkt. No. 1.) Kaneka and SKPI both manufacture and sell polyimide films (“PI films”). (Second Amended Complaint (“SAC”), Dkt. No. 230 ¶ 17.) These films can be made into flexible copper-clad laminates, which are then made into flexible printed circuit boards. (*Id.* ¶ 28.) The patents asserted here include claims covering polyimide films, as well as methods and processes for producing the films.¹ (*Id.* ¶ 16.)

After a transfer of venue, a lengthy stay during an International Trade Commission investigation, several amendments to the Complaint, and a comprehensive Markman hearing, the parties filed cross-motions for summary judgment on June 30, 2014. (Dkt. Nos. 448, 452.) On April 10, 2015, the Court issued its ruling on the motions for summary judgment, granting in part and denying in part each of the motions. (“MSJ Order,” Dkt. No. 513.)

The case proceeded to a jury trial, which commenced on November 3, 2015 and concluded on November 19, 2015. (Minutes of Jury Trial, Dkt. Nos. 658, 668.) At the close of Plaintiff’s case-in-chief, Defendants made their first motion for judgment as a matter of law. (Dkt. No. 644.) The Court denied the motion. (Dkt. No. 665.) At the close of Defendants’ case, Plaintiff made a motion for judgment as a matter of law (Dkt. No. 651), and Defendants renewed their motion, adding additional arguments. (Dkt. No. 652.) The Court denied both motions. (Trial Trans. 11-18 at 9:07 a.m.) On November 18, 2015, the jury received instructions, and, after hearing closing arguments, retired to deliberate. (Dkt. No. 667.)

B. The Verdict

On November 19, 2015, the jury returned a unanimous verdict in favor of Plaintiff. (See Minutes of Jury Trial for Nov. 19, 2015, Dkt. No. 668; Verdict, Dkt. No. 656.)

1. Direct Infringement by SKC

¹ Although the Complaint alleged violations of five patents, the parties stipulated to dismissal of two (Dkt. No. 408), and the Court stayed the action as to one, pending an appeal to the Federal Circuit, (Dkt. No. 486). Therefore, only two patents remain at issue: U.S. Patent Nos. 5,075,064 (“the ‘064 Patent”) and 7,691,961 (“the ‘961 Patent”). The ‘064 Patent, which was issued on December 24, 1991, is entitled “Method and Apparatus for Continuously Producing Resin Films and Installation Therefore.” (SAC ¶ 47.) The ‘961 Patent, which issued on April 6, 2010, covers a specific polyimide film, and is entitled “Polyimide Film and Use Thereof.” (*Id.* ¶ 40.)

Regarding Kaneka's direct infringement claims against SKC, the jury found it is more likely than not each of the films alleged to infringe Claim 1 of the '064 Patent² were made by Kaneka's patented process and SKC directly infringed Claim 1 of the '064 Patent by importing into the United States, or by offering for sale or selling in the United States, each of those accused films. (Verdict ¶¶ 1, 2, Dkt. No. 656.) The jury also found it more likely than not the film alleged to infringe Claims 9 and 10 of the '961 Patent³ was made by Kaneka's patented process and SKC directly infringed Claims 9 and 10 of the '961 Patent by importing into the United States, or by offering for sale or selling in the United States, the accused SKPI film. (Id. ¶ 3.)

2. Induced Infringement by SKPI

Regarding Kaneka's induced infringement claim against SKPI for the '064 Patent, the jury found it more likely than not SKPI was aware of the '064 Patent before Kaneka filed its Complaint on July 26, 2010, and the earliest date SKPI was aware of the '064 Patent was August 5, 2004. (Verdict ¶¶ 4, 5.) The jury also found it more likely than not SKC, Samsung, and/or LG directly infringed Claim 1 of the '064 Patent before March 14, 2010 by importing into the United States, or by offering for sale or selling in the United States, the accused SKPI films or mobile phones that incorporated the accused SKPI films made by the patented process. (Id. ¶ 6.) For purposes of Kaneka's claim of induced infringement against SKPI, the jury found each film accused to infringe Claim 1 of the '064 Patent⁴ was made by Kaneka's patented process. (Id. ¶ 7.) The jury further found it more likely than not SKPI actively and intentionally induced SKC's,

² For Kaneka's claim of direct infringement against SKC, the films alleged to infringe Claim 1 of the '064 Patent are: IF70 12.5 µm; IF70 25 µm; IN30 75 µm (a/k/a LH 75); IN70 19 µm (a/k/a LV70 19 µm, LV 19 µm, LV75 19 µm); IN70 25 µm (a/k/a LV70 25 µm, LV 25 µm, LV100 25 µm); and IN70 50 µm (a/k/a LV70 µm, LV 50 µm, LV 200 50 µm). (Verdict ¶ 2, Doc. No. 656.)

³ For Kaneka's claim of direct infringement against SKC, the film alleged to infringe Claims 9 and 10 of the '961 Patent is LV100 25 µm (a/k/a LV70 25 µm, LV 25 µm, IN70 25 µm). (Verdict ¶ 3.)

⁴ For Kaneka's induced infringement claim against SKPI, the films alleged to infringe Claim 1 of the '064 Patent are: GL70 25 µm; IF70 10 µm; IF70 12.5 µm; IF70 25 µm; IF70 50 µm; IF70 75 µm; IN30 50 µm (a/k/a LH 50 µm); IN30 75 µm (a/k/a LH 75 µm); IN70 19 µm (a/k/a LV70 19 µm; LV 19 µm; LV75 25 µm); IN70 25 µm (a/k/a LV70 25 µm, LV 25 µm, LV100 25 µm); IN70 50 µm (a/k/a LV70 50 µm, LV 50 µm, LV200 50 µm); IN70 75 µm (a/k/a LV70 75 µm, LV 75 µm, LV300 75 µm); LH 50 µm (a/k/a IN30 50 µm); LH 75 µm (a/k/a IN30 75 µm); LN 12.5 µm; LN 25 µm; LN 50 µm; LN70 12.5 µm; LN70 25 µm; LS 12.5 µm; LS 25 µm; LS 50 µm; LV 25 µm (a/k/a LV70 25 µm; LV100 25 µm; IN70 25 µm); LV 50 µm (a/k/a LV70 50 µm, LV200 50 µm, IN70 50 µm); LV 75 µm (a/k/a LV70 75 µm, LV300 75 µm, IN70 75 µm); LV70 25 µm (a/k/a LV 25 µm, LV100 25 µm, IN70 25 µm); and LV70 50 µm (a/k/a LV 50 µm, LV200 50 µm, IN70 50 µm). (Verdict ¶ 7.)

Samsung's, and/or LG's direct infringement of the '064 Patent with knowledge or willful blindness of the patent. (Id. ¶ 8.)

As for the '961 Patent, the jury found it more likely than not SKC, Samsung, and/or LG directly infringed Claims 2, 3, 5, 9, 10, and 12 of the '961 Patent by importing into the United States, or by offering for sale or selling in the United States, the accused SKPI films or mobile phones that incorporated the accused SKPI films that include each limitation of the Claims. (Id. ¶¶ 9, 11.) The jury also found it is more likely than not each film accused to infringe Claim 2,⁵ Claim 3,⁶ Claim 5,⁷ Claim 9,⁸ and Claim 12⁹ of the '961 Patent infringes the respective claims of the patent. (Verdict ¶¶ 10, 12.) As to Claim 10,¹⁰ the jury found all but two of the films¹¹ accused to infringe Claim 10 of the '961 Patent infringe the patent. The jury further found it more likely than not SKPI actively and intentionally induced SKC's, Samsung's, and/or LG's direct infringement of the '961 Patent with knowledge or willful blindness of the patent. (Id. ¶ 13.)

3. Defense of Patent Invalidity

As an affirmative defense to Plaintiff's claims, Defendants asserted both the '064 Patent and the '961 Patent are invalid as anticipated and/or obvious to a person of ordinary skill in the art in view of prior art that was introduced at trial. However, as to each patent, the jury found Defendants did not prove it is highly probable any of the asserted claims of the '064 Patent or '961 Patent are invalid. (Verdict ¶¶ 14, 15.) Defendants also sought to prove it is highly probably

⁵ For Kaneka's induced infringement claim against SKPI, the films alleged to infringe Claims 2 and 3 of the '961 Patent are: LN050 12.5 µm; LN100 25 µm; IF70 25 µm; IF70 50 µm; and IF70 75 µm. (Verdict ¶ 10.)

⁶ See fn. 5.

⁷ For Kaneka's induced infringement claim against SKPI, the films alleged to infringe Claim 5 of the '961 Patent are: LN050 12.5 µm; LN100 25 µm; IF70 12.5 µm; IF70 25 µm; IF70 50 µm; and IF70 75 µm. (Verdict ¶ 10.)

⁸ For Kaneka's induced infringement claim against SKPI, the films alleged to infringe Claims 9, 10, and 12 of the '961 Patent are: LN050 12.5 µm; LN100 25 µm; IF70 12.5 µm; IF70 25 µm; IF70 50 µm; IF70 75 µm; LV100 25 µm (a/k/a LV70 25 µm, LV 25 µm, IN70 25 µm); LV200 50 µm (a/k/a LV70 50 µm, LV 50 µm, IN70 50 µm); and LV300 75 µm (a/k/a LV70 75 µm, LV 75 µm, IN70 75 µm). (Verdict ¶ 12.)

⁹ See fn. 8.

¹⁰ See fn. 8.

¹¹ The two films found not to infringe Claim 10 of the '961 Patent are: IF70 (25 µm) and IF70 (75 µm). (Verdict ¶ 12.) As to IF70 (25 µm), it appears the jury initially checked the box indicating it did infringe, but subsequently wrote "No" over the check mark. The Court interprets this to mean the jury changed its mind and ultimately found IF70 (25 µm) does not infringe Claim 10 of the '961 Patent.

the '961 Patent does not contain a description of the invention of Claims 2, 3, and 5 that is sufficiently full and clear to enable a person of ordinary skill in the art to make and use the full scope of the claimed invention. The jury found against Defendants as to each Claim on this affirmative defense. (Id. ¶ 16.)

4. Defense of Patent Exhaustion

Defendants also asserted patent exhaustion as an affirmative defense. Specifically, Defendants introduced evidence at trial that Kaneka granted a Japanese company, Hirano, a license to manufacture and sell polyimide film production equipment – equipment which allegedly practiced the patents-in-suit – and that SKPI and/or its Global Partners (SKC or Kolon) purchased this equipment from Hirano in a sale authorized under the license Kaneka granted to Hirano. However, the jury found Defendants failed to prove it more likely than not the sale of polyimide film production equipment was an authorized sale under the license. (Verdict ¶ 17.)

5. SKC's Lanham Act Counterclaim

SKC sought to prove Kaneka acted in bad faith when it sent letters to SKC's existing or potential customers which contained allegedly false or misleading statements regarding this lawsuit and SKC's alleged infringement of Kaneka's patents. However, the jury found SKC did not prove it is highly probable that Kaneka acted in bad faith when it sent the letters. (Verdict ¶ 24.)

6. Damages

The jury awarded Kaneka \$13,488,765.06 in lost profits for sales Kaneka would have made with reasonable probability but for SKPI's infringement of the patents-in-suit. (Verdict ¶¶ 19, 22.) Specifically, the jury awarded Kaneka \$5,920,389.50 for lost profits due to SKPI's infringement of the '064 Patent (id. ¶ 19), and \$7,568,375.56 for lost profits due to SKPI's infringement of the '961 Patent (id. ¶ 22). The jury did not award any royalty to Kaneka for infringing sales by SKPI of either the '064 Patent or the '961 Patent. (Id. ¶¶ 20, 23.) The jury also did not award any royalty to Kaneka for infringing sales by SKC of either the '064 Patent or the '961 Patent. (Verdict ¶¶ 18, 21.)

7. Post-Trial Motions

Following the jury's verdict, on December 17, 2015, Defendants filed a third motion for judgment as a matter of law on Kaneka's induced infringement claims, or, in the alternative, for a new trial on those claims. (Dkt. No. 692.) The Court denied it on August 2, 2016, finding the equitable defenses of implied license and laches did not bar Plaintiff's claims. ("August 2016 Order," Dkt. No. 730.) In that same order, the Court also partially granted Plaintiff's Motion for Entry of Judgment, finding the judgment need only identify products, not individual samples. (Id. at 29.) However, as the jury did not award Plaintiff royalties for Defendants' direct infringement of the '064 and '961 patents, Plaintiff was not entitled to receive them. (Id. at 30.)

II. DEFENDANTS' MOTION FOR JUDGMENT AS A MATTER OF LAW, OR ALTERNATIVELY, A NEW TRIAL

On June 22, 2017, Defendants filed the instant JMOL, their fourth. Plaintiff filed an opposition on July 3, 2017. (“JMOL Opposition,” Dkt. No. 756.) Defendants filed a reply on July 24, 2017. (“JMOL Reply,” Dkt. No. 760.) In their JMOL, Defendants argue the following: (1) Kaneka exhausted its ‘064 Patent Rights; (2) Claim 1 of the ‘064 patent is invalid as obvious; (3) Kaneka did not prove infringement of the ‘961 patent; (4) the ‘961 patent claims are invalid as anticipated or obvious; (5) the claims of the ‘961 patent are invalid for lack of enablement; and (6) that the lost profits verdict is contrary to law. (JMOL at i.) The Court examines each argument below.

A. Legal Standards

1. Judgment as a Matter of Law

Federal Rule of Civil Procedure¹² 50 provides that “[a] motion for judgment as a matter of law may be made at any time before the case is submitted to the jury.” Fed. R. Civ. P. 50(a). If the court does not grant the motion, “the court is considered to have submitted the action to the jury subject to the court’s later deciding the legal questions raised by the motion.” Fed. R. Civ. P. 50(b). “No later than 28 days after the entry of judgment—or if the motion addresses a jury issue not decided by a verdict, no later than 28 days after the jury was discharged—the movant may file a renewed motion for judgment as a matter of law and may include an alternative or joint request for a new trial under Rule 59.” *Id.* In ruling on the renewed motion, the court may uphold the jury’s verdict, order a new trial, or direct entry of judgment as a matter of law. *Id.*

In patent cases, the law of the regional circuit governs the grant or denial of a motion for judgment as a matter of law. *Summit Tech. Inc. v. Nidek Co.*, 363 F.3d 1219, 1223 (Fed. Cir. 2004). In the Ninth Circuit, a jury’s verdict “must be affirmed if there is substantial evidence to support the verdict.” “Substantial evidence is such relevant evidence as reasonable minds might accept as adequate to support a conclusion even if it is possible to draw two inconsistent conclusions from the evidence.” *Gilbrook v. City of Westminster*, 177 F.3d 839, 856 (9th Cir. 1999) (citation omitted). The court should only enter judgment as a matter of law if “the evidence, construed in the light most favorable to the non-moving party, permits only one reasonable conclusion, and that conclusion is contrary to the jury’s.” *Callicrate v. Wadsworth Mfg., Inc.*, 427 F.3d 1361, 1366 (Fed. Cir. 2005) (citing *Pavao v. Pagay*, 307 F.3d 915, 918 (9th Cir. 2002)).

¹² Unless otherwise noted, all references to “Rule” are to the Federal Rules of Civil Procedure.

2. Motion for New Trial

Similar to Rule 50 motions, the law of the regional circuit governs a district court's consideration of a motion for new trial under Rule 59(a) in patent cases. Callicrate, 427 F.3d at 1366. Rule 59(a) of the Federal Rules of Civil Procedure governs whether a court should grant a motion for a new trial. Fed. R. Civ. P. 59(a). Under Rule 59(a), a new trial may be granted to any party on all or part of the issues, "for any reason for which a new trial has heretofore been granted in an action at law in federal court." Id. The grounds upon which a court may grant a new trial are not enumerated in Rule 59(a). Nevertheless, courts commonly grant new trials "if the verdict is contrary to the clear weight of evidence . . . or to prevent a miscarriage of justice." Molski v. M.J. Cable, Inc., 481 F.3d 724, 729 (9th Cir. 2007) (quoting Passantino v. Johnson & Johnson Consumer Prods., 212 F.3d 493, 510 n.15 (9th Cir. 2000)).

In considering a motion for a new trial, the court must "determine whether the verdict is consistent with the evidence after considering all of the events of trial. The judge must review the evidence, view all the evidence as a whole, and weigh the relative strengths and weaknesses of the evidence." Turnbull v. Am. Broad. Cos., No. CV 03-3554-SJO (FMOx), 2005 WL 6054964, at *2 (C.D. Cal. Mar. 7, 2005) (quoting 12 James Wm. Moore et al., Moore's Federal Practice § 59.13[2][f]). A new trial may be granted "only if the verdict is so clearly against the weight of evidence as to amount to a manifest miscarriage of justice." Id.; accord E.E.O.C. v. Pape Lift, Inc., 115 F.3d 676, 680 (9th Cir. 1997) (stating a new trial may be granted "only if the verdict is against the great weight of the evidence or it is quite clear that the jury has reached a seriously erroneous result").

The corollary to this principle is a court "must uphold a jury verdict if it is supported by substantial evidence." Guy v. City of San Diego, 608 F.3d 582, 585-86 (9th Cir. 2010). Evidence is sufficiently "substantial" to support a jury's finding when it is "'adequate to support the jury's conclusion, even if it is also possible to draw a contrary conclusion.'" Specifically, [courts] must uphold a jury's damages award unless the amount is 'clearly not supported by the evidence, or only based on speculation or guesswork.'" Id. (quoting Pavao v. Pagay, 307 F.3d 915, 918 (9th Cir. 2002); L.A. Mem'l Coliseum Comm'n v. Nat'l Football League, 791 F.2d 1356, 1360 (9th Cir. 1986)). Moreover, the Court has "a duty 'to reconcile the jury's special verdict responses on any reasonable theory consistent with the evidence.'" Id. at 586 (quoting Pierce v. S. Pac. Transp. Co., 823 F.2d 1366, 1370 (9th Cir. 1987)); accord Gallick v. Baltimore & O.R. Co., 372 U.S. 108, 119 (1963) ("We therefore must attempt to reconcile the jury's findings, by exegesis if necessary, ... before we are free to disregard the jury's special verdict and remand the case for a new trial."); Atl. & Gulf Stevedores, Inc. v. Ellerman Lines, Ltd., 369 U.S. 355, 364 (1962) ("Where there is a view of the case that makes the jury's answers to special interrogatories consistent, they must be resolved that way.").

B. Exhaustion

“[T]he patent exhaustion inquiry focuses on a single question: whether or not there was an authorized sale that triggered the exhaustion of the patentee’s right.” Cornell Univ. v. Hewlett-Packard Co., No. 01-CV-1974, 2008 WL 5671886, at *1 (N.D.N.Y. Aug. 1, 2008).

In its August 2016 Order, the Court discussed in detail Defendants’ affirmative defense of patent exhaustion. (See August 2016 Order at 24–26.) Portions of that order are reproduced here. On December 2, 1993, Kaneka granted Hirano “an exclusive regular license covering the entire scope of the subject patent rights,” which included the ‘064 Patent. (“Hirano License,” Dkt. No. 715-64.) This license permitted Hirano to manufacture and sell polyimide film production equipment, equipment which was made to Kaneka’s precise specifications. (Testimony of Mr. Yoshioka, Trial Transcript November 5, 2015, p.m., at 30:19-24, 38:22-41:18.) In 2005, SKPI’s predecessors purchased this equipment from Hirano and used it to make the PI film that is the subject matter of this lawsuit. (Dkt. No. 715-8.) Defendants contend SKPI cannot be liable for using that equipment to manufacture its polyimide film because Kaneka granted Hirano a license to sell equipment which practiced the ‘064 Patent. (JMOL. at 7.) Defendants argue “[n]othing in the record supports a finding that Hirano intended, or otherwise agreed, that the Hirano license allowed sales of equipment only to non-competitors of Kaneka.” Id. at 9.

Defendants previously moved to bifurcate its patent exhaustion and implied license defenses from the jury trial on the grounds that there is no right to have a jury decide an equitable defense to patent infringement. (See Defendants’ Motion to Strike the Jury Demand and Bifurcate the Patent Exhaustion and Implied License Defenses, Dkt. No. 521; see also Paragon Podiatry Lab., Inc. v. KLM Labs., Inc., 984 F.2d 1182, 1190 (Fed. Cir. 1993) (finding no right exists for a jury to decide the defense of inequitable misconduct).) Neither party disputed that implied license is an equitable defense properly adjudicated by the Court. See Met-Coil Sys. Corp. v. Korner Unlimited, Inc., 803 F.2d 684 (Fed. Cir. 1986); Wang Labs, Inc. v. Mitsubishi Elecs., 103 F.3d 1571, 1578 (Fed. Cir. 1997). However, the Court denied the motion as to the defense of patent exhaustion because it found patent exhaustion is a legal defense, and as such, is one properly decided by a jury. (Dkt. No. 526.) Accordingly, the jury determined whether Defendants proved by a preponderance of the evidence the sale of polyimide film production equipment by Hirano to SKPI and/or its Global Partners, SKC or Kolon, was an authorized sale under the license Kaneka granted to Hirano. (See Verdict, ¶ 17.)

The Court put the question directly to the jury, asking if “[Defendants have] proven that it is more likely than not that the sale of polyimide film production equipment by Hirano to SKIP and/or its Global Partners (SKC or Kolon) was an authorized sale under the license Kaneka granted to Hirano?” (JMOL Opposition at 2, quoting Dkt. No. 656 at 10.) The jury found Defendants had not met their burden. (Dkt. No. 656 at 10.)

The jury’s finding that the Hirano license did not authorized the sale of PI film manufacturing equipment to SKPI’s predecessors is a factual finding. See Cornell Univ., 2008 WL 5671886, at *1 (recognizing that patent exhaustion “presents a factual question”). This

Court cannot now find the sales were authorized. Therma-Tru Corp. v. Peachtree Doors Inc., 44 F.3d 988, 994-95 (Fed. Cir. 1995) (“the court may not make findings in conflict with those of the jury”); see also Beacon Theatres, Inc. v. Westover, 359 U.S. 500, 510–11 (1959) (explaining when equitable claims are joined with legal claims and have factual questions in common, the judge’s determination of the equitable claims cannot deprive the litigants of their right to a jury trial on factual questions).

The Court instructed the jury that Kaneka, SKPI, and SKC disputed the meaning of the Hirano license, and, “[i]n deciding the meaning of the Hirano license, you must decide what the parties intended at the time the contract was created.” (Jury Instruction No. 32, Dkt. No. 702-1.) Further, the Court directed, “[i]n interpreting the Hirano license, you may consider the wording of the contract as well as the intent of the parties and the circumstances leading to the execution of the contract.”¹³ (*Id.*) It is reasonable to conclude the jury did in fact consider the parties’ intent and the circumstances leading to the execution of the contract. The terms of the license granted Hirano “an exclusive regular license covering the entire scope of the subject patent rights,” which include the ‘064 Patent. (Hirano License at 1, Trial Exhibit 1018, Dkt. No. 715-64.) On its face, this language unambiguously suggests Kaneka granted Hirano an exclusive license to sell equipment which practiced the ‘064 Patent without regard to which customers were permitted to purchase it. However, Kaneka presented evidence at trial demonstrating Hirano knew the license agreement only permitted it to sell the equipment to customers that did not compete with Kaneka.

Tetsuo Yoshioka, one of the inventors of the ‘064 Patent, testified that prior to the execution of the license, he was told Hirano wanted a license so it could sell to a non-competitor of Kaneka: “if it’s not a competitor, then it’s okay. It would be okay to sell it. As long as it was being sold and was not going to compete with us, then that would be okay. That was the discussion with Hirano.” (Testimony of Mr. Yoshioka, Trial Transcript November 6, 2015, p.m., at 11:10-19; 10:2-5.) Further, Hiroyuki Tsuji of Kaneka testified Kaneka had a corporate licensing policy to not license to competitors that has existed “throughout” its history and it was Kaneka’s policy to convey this licensing policy to companies who seek licenses from Kaneka. (Testimony of Mr. Tsuji, Trial Transcript, November 4, 2015, p.m., 46:23-47:24.) Given this evidence, it is reasonable to infer the jury was persuaded that, in 1993, Hirano knew the license Kaneka granted it did not authorize Hirano to sell PI film to Kaneka’s competitors, which SKPI’s predecessors indisputably were. Additionally, Mr. Takao Yamano, an engineer for Hirano who helped Kaneka in the initial development of the film making machines, affirmed the Hirano License was created solely to allow a sale to a non-competitor. He testified a third company, which “in no way” was a competitor to Kaneka, requested a license so Hirano could sell equipment to them. (Dkt. No. 655-7, at 10–11.)

¹³ The license was a contract executed in Japan, and as such, Japanese law governs its interpretation. (See MSJ Order at 12.) Under Japanese law, a court would consider extrinsic evidence to interpret a contract, even if a contract provision appears unambiguous. (*Id.* at 13.)

Moreover, as Japanese law controls the interpretation of the contract, the jury was properly instructed they could consider extrinsic evidence regarding the contracts meaning even if the language was unambiguous. (See Dkt. No. 511 at 13; Dkt. No. 526 at 6.) SKPI did not object to the instruction allowing the jury to consider extrinsic evidence. It is reasonable, given the evidence proffered, the jury could find credible the extrinsic evidence and witness testimony which supports Plaintiff's preferred interpretation. Therefore, the Court rejects Defendants' argument regarding patent exhaustion.

C. '064 Patent Obviousness

A patent is invalid as obvious "if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." 35 U.S.C. § 103(a). "Obviousness is a question of law based on underlying factual findings: (1) the scope and content of the prior art; (2) the differences between the claims and the prior art; (3) the level of ordinary skill in the art; and (4) objective indicia of nonobviousness." Kinetic Concepts, Inc. v. Smith & Nephew, Inc., 688 F.3d 1342, 1360 (Fed. Cir. 2012) (quoting Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 17 (1966)). Secondary factors such as commercial success, long felt but unsolved needs, and the failure of others may be relevant as indicia of obviousness or nonobviousness. Graham, 383 U.S. at 17–18. "A party seeking to invalidate a patent on the basis of obviousness must demonstrate by clear and convincing evidence that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so." Kinetic Concepts, 688 F.3d at 1360 (internal citations omitted) (quoting Procter & Gamble Co. v. Teva Pharm. USA, Inc., 566 F.3d 989, 994 (Fed. Cir. 2009)). While an analysis of any teaching, suggestion, or motivation to combine elements from different prior art references is useful to an obviousness inquiry, the overall inquiry is flexible. Kinetic Concepts, 688 F.3d at 1360 (citing KSR Int'l Co. v. Teleflex, Inc., 550 U.S. 398, 415 (2007)).

Defendants argue the "invention in claim 1 falls squarely within the prior art," rendering it obvious. (JMOL at 11–12.) Specifically, Defendants contend all the elements in claim 1 are disclosed in the prior art, including the parallel flow feature. (Id. at 12.) Defendants point out the '064 patent itself admits only the use of a parallel flow is a new change to the film making process. (Id.) Additionally, Defendants characterize inventor Mr. Yoshioka's testimony as him admitting the prior art and relevant literature disclosed the parallel flow feature. (Id.) Furthermore, Defendants state Mitsubishi disclosed two different sequential applications of air flow to a resin film cast. (Id. at 12–13.) Though disclosure came without illustrations, Defendants contend the disclosure combined with what was known in the art renders claim 1 invalid as obvious. (Id. at 13.) Finally, Defendants argue applying the parallel flow feature to Mitsubishi's belt dryer would have been obvious to a person of ordinary skill in the art, and use Mr. Yoshioka's own words to buttress the point. (Id. at 13–14.) Mr. Yoshioka stated on his patent application the invention was "easily invented from the prior art known to the inventor." (Dkt. No. 755-28, at 4.)

Plaintiff argues claim 1 of the '064 Patent is not obvious in view of the prior art references. First, Plaintiff notes Dr. Wilkes, SKPI's expert, admits Mitsubishi neither mentions a parallel or substantially parallel flow, nor illustrates their equipment and air flow. (JMOL Opposition at 6, citing Trial Transcript, November 13, 2015, a.m. at 104:4–6.) Moreover, Dr. Wilkes testimony demonstrates Fuji did not teach parallel-stream hardening either. (JMOL Opposition at 7.) Fuji's method requires hot air be first blown down onto the film surface before it travels in a parallel direction. (Trial Transcript, November 13, 2015, a.m. at 107:15–20.) By contrast, Mr. Yoshioka's method requires using parallel-stream pre-hardening before the jet hardening. (Id. at 28:10–29:10.) Finally, Plaintiff contends the invention is not obvious simply because Mr. Yoshioka found the claim easily invented after years of study. (JMOL Opposition at 8.) Plaintiff cites Standard Oil Co. v. Am. Cyanamid Co., for the proposition that “[t]he issue of obviousness is determined entirely with reference to a hypothetical person having ordinary skill in the art . . . [t]he actual inventor's skill is irrelevant to the inquiry.” 774 F.2d 448, 454 (Fed. Cir. 1985). “A person of ordinary skill in the art is also presumed to be the one who thinks along the line of conventional wisdom in the art and is not the one who undertakes to innovate.” Id.

The Court finds Plaintiff's arguments persuasive and does not consider claim 1 of the '064 Patent to be obvious. The Mitsubishi and Fuji references did not anticipate Mr. Yoshioka's invention. The Mitsubishi reference lacked illustrations of equipment and method and the Fuji reference taught away from Mr. Yoshioka's method of parallel-stream hardening. While true the Mitsubishi reference describes air being “blown onto the film from above and below” (Trial Exhibit 1066 at 10), it is exactly the lack of reference to parallel-stream hardening which makes Mr. Yoshioka's claim unobvious. Mr. Yoshioka did not invent the only method to make this resin film, rather, he improved on existing methods to make a new and unique thing. It is therefore natural that much of his process is used in other references. “[I]nventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.” KSR Int'l Co., 550 U.S. at 418–19. Additionally, the Court is not persuaded the claim is obvious to a person of ordinary skill in the art simply because the inventor found it easily made after years of study. See Standard Oil Co., 774 F.2d at 448. Defendants, therefore, have not proven by clear and convincing evidence claim 1 of the '064 Patent is obvious. Therefore, the Court rejects Defendants' argument regarding obviousness of the '064 Patent.

D. Infringement of the '961 Patent

A determination of infringement is a question of fact reviewed for substantial evidence when tried to a jury. ACCO Brands, Inc. v. ABA Locks Mfrs., 501 F.3d 1307, 1311 (Fed. Cir. 2007). Willful infringement must be proven by clear and convincing evidence. Id. Defendants contend the jury's findings regarding infringement of the '961 Patent are not supported by law. (JMOL at 14.) Defendants' argument centers on the analysis of Dr. Harris, Plaintiff's expert witness. Defendants argue Dr. Harris failed to apply the proper statistical analysis when determining whether Defendants had infringed on the '0961 Patent. (Id.) “Although Dr. Harris provided standard deviations for the measured values, he did not apply them to determine the

uncertainty of his measured values; nor did he calculate or apply standard deviations to the ratios he calculated from the averages of the measured values.” (*Id.* at 16.) Defendants cite Apotex, Inc. v. Cephalon, Inc., 2012 WL 1080148 (E.D. Pa. Mar. 28, 2012) and Astra Aktiebolag v. Andrx Pharmaceuticals, Inc., 222 F. Supp. 2d 423 (S.D.N.Y. 2002) for the proposition that an expert’s reliance on averages alone is insufficient to prove infringement. (JMOL at 16–17.)

Plaintiff notes Dr. Harris’s test results followed the relevant American Society for Testing and Materials standards. (JMOL Opposition at 16). Additionally, Dr. Harris testified his data was demonstrably reliable due to a very small standard deviation or scatter. (*Id.* (citing Trial Transcript, November 12, 2015, a.m. at 80:14–81:7; 82:18–83:20; 99:5–8).) Dr. Harris testified the relative standard deviations were “2 to 3 percent, very small.” (Trial Transcript, November 12, 2015, p.m. at 13:21–14:1; 21:20–22:4.) While Defendants argue infringement can only be shown if the range defined by the average +/- one or more standard deviations falls entirely within the claimed range is supported by law, Plaintiff believes this argument is not supported by law or evidence. First, Plaintiff argues Apotex does not hold an expert cannot rely on averages, but instead that test data is unreliable when there is a “high degree of variance within each sample.” 2012 WL at *12. The Courts reading of Apotex confirms Plaintiff’s characterization. There, the court was reasonably concerned with the strong amount of variation between tests. *Id.* “[T]he nonetheless renders [the] testing an unreliable basis.” *Id.* Similarly, the court in Astra seemed also uncomfortable with the “very high standard deviation” evinced in the water content tests. Astra, 222 F. Supp. at 493. There, the court noted the average water content in Cheminor’s products averaged 1.42% with a 0.2 standard deviation. *Id.* at 521–22. Consequently, the data was accurate with a range of 1.22% to 1.62%. *Id.* at 522. Additionally, the test samples ranged widely from 0.83% to 1.76%. *Id.* The wide range of test samples in conjunction with concerns about the testing methods led the court to conclude the test results do not demonstrate by a preponderance of the evidence Cheminor’s products have a water content of less than 1.5%. *Id.*

Of chief concern to the Court is not the specific details in these cases, but the fact that they, by their analyses, do not preclude an expert using averages instead of standard deviations to demonstrate infringement. Defendants seem to suggest using averages is an invalid method of calculation, however, their cited cases do not stand for that proposition. Instead, the cited cases take issue with the large variation in the test samples the experts examined, a problem not at issue here. The Court finds the jury verdict rested on sufficient and substantial evidence. The jury did not have to take Defendants’ expert Dr. Mecham’s testimony at face value, especially considering it appears she may have confused the quality control standard with the preponderance of the evidence standard. (Trial Transcript, November 12, 2015, p.m. at 65:6–66:24.) Thus, the Court finds sufficient evidence exists to support the jury’s verdict and rejects Defendants’ argument concerning infringement of the ‘961 Patent.

E. ‘961 Patent Obviousness

Defendants next argue the prior art DuPont film demonstrates Kaneka’s asserted claims are invalid. (JMOL at 20.) The samples produced by DuPont (“DUPONT 2” and “DUPONT

3”) were made in 2003 and were representative of DuPont Kapton 200HN and Kapton 200FPC, respectively. (*Id.*) Defendants argue DuPont’s Kapton 200HN and Kapton 200 FPC film anticipate claims 2 and 9 of the ‘961 Patent because the average A values and average d/c values meet the limitations outlined in claims 2 and 9. (*Id.* at 21.) Additionally, DuPont’s film was also continuously cast, though on a rotating drum. (*Id.*) Furthermore, Defendants argue the range of molecular orientation for the DUPONT 2 and DUPONT 3 also meets the limitations of claims 3 and 10 respectively. (*Id.*)

Plaintiff does not dispute the substance of Defendants’ science, but instead challenge the credibility of the evidence. At trial, Defendants’ expert Dr. Wilkes relied on two test reports (TX 1040 and TX 1047) to challenge the validity of the ‘961 Patent. (Trial Transcript, November 13, 2015, a.m. at 52:2–53:11; 69:3–11.) On cross examination, however, Dr. Wilkes admitted he did not perform any of the testing in TX 1040 and TX 1047. (*Id.* at 80:11–22; 83:21–84:5; 87:12–22.) Because Dr. Wilkes was not involved in the chain of custody, he was unable to confirm whether the film he examined corresponded appropriately to the report in each photograph. (*Id.* at 88:6–89:8.) Consequently, Dr. Wilkes admitted his invalidity analysis assumed the DuPont report in each photograph was put together with the correct film. (*Id.* at 90:8–91:2.)

The Court is also concerned Dr. Wilkes relied on tainted test methods. Claim 1 requires a measurement of the coefficient of linear expansion (“CTE”) along the molecular orientation axis and in the perpendicular direction. (Dkt. No. 750-5 at 27.) However, the CTE measurements at one edge of the film were not taken at perpendicular angles, but at +67.4 degrees and -34.5 degrees. (Dkt. No. 750-31 at 5.) Dr. Wilkes acknowledged this was an inappropriate angle. (Trial Transcript, November 13, 2015, a.m. at 97:2–15.) Moreover, Defendant SKPI itself performed the testing, presenting an obvious conflict of interest that even concerned Dr. Wilkes, Defendants’ expert witness. (*Id.* at 80:23–81:9; 82:19–83:5.) Defendants’ other expert, Dr. Mecham, also testified that typically testing is performed by independent laboratories. (Trial Transcript, November 12, 2015, p.m. at 61:2–10.)

Taken together, the Court finds the jury had before it sufficient evidence to discredit the testimony of Dr. Wilkes, either because of an unverifiable chain of custody or because of potentially biased and inaccurate testing. Thus, the Court rejects Defendants’ argument that the ‘961’ Patent was obvious or anticipated as a matter of law.

F. ‘961 Patent Enablement

Section 112 of the Patent Act requires a patent specification contain “a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art . . . to make and use the same.” 35 U.S.C. § 112. That obligation “requires the patentee . . . to describe [the invention] in such terms that any person skilled in the art to which it appertains may construct and use it after the expiration of the patent.” *Permutit Co. v. Graver Corp.*, 284 U.S. 52, 60 (1931). The patent specification must “enable a person of skill in the art to make and use the full scope of the

invention without undue experimentation.” LizardTech, Inc. v. Earth Res. Mapping, Inc., 424 F.3d 1336, 1345 (Fed. Cir. 2005).

Defendants argue claims 2, 3, and 5 are not enabled. (JMOL at 23.) Those claims cover films “with a coefficient of linear expansion ration A in the range of 1.13 to 3.00 across the entire width.” (Id. at 23–24.) Dr. Wilkes testified it was not possible to create a film with an A of 3.00 following the protocol of the ‘961 Patent. (Trial Transcript, November 13, 2015, a.m. at 73:8–74:15.) According to Dr. Wilkes, achieving an A of 3.00 requires the film’s CTE in the molecular direction to be precisely zero, meaning the film neither shrinks nor expands in response to application of temperatures between 100 and 200 degrees Celsius. (Id. at 74:16–778; Trial Transcript, November 5, 2015, a.m. at 39:6–11 (‘961 patent inventor agreeing a CTE of zero means the film does not expand or contract); Dkt. No. 750-5.) Dr. Wilkes testified, in his opinion, achieving a value of zero “scientifically isn’t going to happen.” (Trial Transcript, November 13, 2015, a.m. at 74:20–77:8.)

Plaintiff counters in several ways. First, Plaintiff notes Defendants are not arguing it takes experimentation to achieve a film with a CTE of zero in the molecular orientation direction, but instead that this feat is scientifically impossible. (JMOL Opposition at 12–13.) Plaintiff argues this contention is the sole opinion of Dr. Wilkes, given without investigation into the relevant scientific studies or without any experimentation on his part. (Trial Transcript, November 13, 2015, a.m. at 74:8–77:19.) Plaintiff therefore characterizes Dr. Wilkes’s opinion as unsupported and conclusory. Furthermore, Dr. Fujihara, an inventor of the ‘961 Patent, testified it is possible to achieve a polyimide film with a CTE of zero. (Trial Transcript, November 5, 2015, a.m. at 39:12–40:1.) His testimony was based on his review of the scientific literature concerning polyimide films and the experiments he conducted in his own laboratory, where he was able to create a polyimide film with a CTE of zero. (Id.)

In response, Defendants argue Dr. Fujihara did not make a polyimide film with a CTE of zero when measured according to the 961’ Patent protocol, or that he created the film using based on the disclosures contained in the ‘961 Patent. However, Section 112 “requires nothing more than objective enablement. How such a teaching is set forth, either by the use of illustrative examples or by broad terminology, is of no importance.” Eli Lilly & Co. v. Actavis Elizabeth LLC, 435 F. App’x 917, 925 (Fed. Cir. 2011) quoting In re Marzocchi, 439 F.2d 220 (C.C.P.A. 1971). Additionally, Dr. Wilkes took the position it was scientifically impossible to create a film with a CTE of zero. Thus, the jury had sufficient evidence to determine Dr. Fujihara’s testimony, which was supported by literature review and scientific experimentation, was more credible than Dr. Wilkes’s naked assertions. Defendants have not established the clear and convincing evidence required to overturn the jury’s determination. The Court, therefore, rejects this argument.

G. Lost Profits Verdict

Lastly, Defendants argue the record is insufficient to permit entry of a corrected damage award, even assuming Kaneka prevails on liability issues. (JMOL at 25.) In order to obtain lost

profits, the seeking party must meet the four-factor Panduit test which establishes the requisite causation. Versata Software, Inc. v. SAP Am., Inc., 717 F.3d 1255, 1264 (Fed. Cir. 2013). These factors include: “(1) demand for the patented product, (2) absence of acceptable noninfringing substitutes, (3) his manufacturing and marketing capability to exploit the demand, and (4) the amount of the profit he would have made.” Panduit Corp. v. Stahl Bros. Fibre Works, 575 F.2d 1152, 1156 (6th Cir. 1978). Whether lost profits are legally compensable is a question of law, reviewed *de novo*. Rite-Hite Corp. v. Kelley Co., 56 F.3d 1538, 1544 (Fed. Cir. 1995).

As an initial matter, in a prior motion in limine the Court found Plaintiff’s damages expert Mr. Napper “bases his opinion on reliable documentation and testimony produced in this litigation.” (Dkt. No. 643 at 7.) Additionally, Defendants offered no expert witness of their own to rebut Mr. Napper’s testimony during trial.

1. Demand for the Patented Product

Defendants cite Calico Brand, Inc. v. Ameritek Imports Inc., 527 F. App’x 987, 996 (Fed. Cir. 2013) for the proposition that “evidence of gross sales data is [insufficient] . . . to establish consumer demand based on the patented safety mechanism.” There, the patent at issue concerned the safety mechanism apparatus inside a utility lighter. Id. at 989. The claimed invention was not the utility lighter as a whole, but specifically the safety lock mechanism inside the lighter. Id. The court found the safety lock mechanism was not a driver of consumer demand, thus the parties could not use the gross sales data as evidence of demand for the patented product. Id. at 996. “[D]emand for the entire apparatus is, in most circumstances, not interchangeable with demand for a patented component of the larger apparatus.” Id.

Plaintiff contends, and the Court agrees, Calico Brand is of limited use here. The patents at-issue cover the entire infringing product as a whole, not a small piece of a larger product. The films themselves are patented, not a small part of the larger film. (August 2016 Order at 9–12.) Considering that Calico Brand, an unpublished opinion, is easily distinguishable from this case, the Court finds Defendants’ reliance on it to be misplaced. By contrast, it is well established a “substantial number of sales . . . of infringing products containing the patented features itself is compelling evidence of the demand for the product.” Gyromat Corp. v. Champion Spark Plug Co., 735 F.2d 549, 552 (Fed. Cir. 1984). Plaintiff’s expert Mr. Napper testified SKPI sold \$357 million worth of infringing product, while Kaneka sold \$380 million of its patented film products. (Trial Transcript, November 10, 2015, p.m. at 38:6–19.) This is sufficient to meet this factor. “[T]he first *Panduit* factor simply asks whether demand existed for the patented product.” DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc., 567 F.3d 1314, 1330 (Fed. Cir. 2009) (internal quotations omitted).

2. Absence of Acceptable Noninfringing Substitutes

Defendants make much of Kaneka’s supposed failure to prove no acceptable, noninfringing substitutes exist. “Kaneka must also prove the absence of acceptable, noninfringing alternatives from any source, including SKPI.” (JMOL at 26.) But Defendants misread the standard. In a “two-supplier market, it is reasonable to assume provided the patent

owner has the manufacturing and marketing capabilities, that it would have made the infringer's sales." State Indus., Inc. v. Mor-Flo Indus., Inc., 883 F.2d 1573, 1578 (Fed. Cir. 1989). "If the patentee shows two suppliers in the relevant market, capability to make the diverted sales, and its profit margin, that showing erects a presumption of 'but for' causation," which Defendants can rebut by demonstrating another available, noninfringing substitute in the relevant market. Micro Chem., Inc. v. Lextron, Inc., 318 F.3d 1119, 1125 (Fed. Cir. 2003).

Kaneka has set forth sufficient evidence that the relevant market in Korea was limited to sales to Innos and Hanwha, and the only film suppliers to those two companies were Kaneka and SKPI. (Trial Transcript, November 10, 2015, p.m. at 32:2-17; 98:11-15; Dkt. 750-4 at 0023; Dkt. No. 755-55 at 0027). The burden then shifts to Defendants to rebut that presumption. Micro Chem., 318 F.3d at 1125. Defendants argue three different films could qualify as an acceptable noninfringing substitute. (JMOL at 27.)

a. DuPont's Film

Defendants allege DuPont marketed and sold acceptable film which is prior art to the '961 Patent and therefore cannot be infringing. (Id.) Defendants purport DuPont's films tout the same benefits as the Kaneka patents, were present in the Korean market before and during the damages period, was regularly purchased by Hanwha before SKPI entered the market, and was still used in Samsung and LG phones even after SKPI entered the market. (Id., (citing Dkt. Nos. 750-7, 750-24 at 8-9, 750-25 at 19-20, 750-23; Trial Transcript, November 10, 2015, p.m. at 47:3-13).)

By contrast, Mr. Napper testified DuPont had a very small number of sales in the Korean market to a single customer, TSI, which is a DuPont-related entity. (JMOL Opposition at 25, citing Trial Transcript, November 10, 2015, p.m. at 33:10-34:4.) Additionally the DuPont film was also priced 12.6% higher than the Kaneka price point and 14% higher than the SKPI price point. Kaneka cites to Kaufman Co. v. Lantech, Inc., 926 F.2d 1136, 1142 (Fed. Cir. 1991) for the proposition that "the alleged acceptable noninfringing substitute must not have a disparately higher price than ... the patented product." Additionally, Plaintiff presented evidence DuPont "had almost no share at the time the cell phone market started to take off," which was when the iPhone was introduced in 2007. (JMOL Opposition at 26; Trial Transcript, November 4, 2015, a.m. at 65:3-9.) Moreover, Plaintiff introduced evidence demonstrating DuPont was not certified for use in Samsung and LG phones, and that certification process could take up to a year. (Trial Transcript, November 10, 2015, p.m. at 47:14-24; Dkt. No. 755-24 at 2.) Notably, an alternative must be readily commercialized for it to be available for the purposes of a lost profits determination. See Micro Chem., 318 F.3d 1123.

While the evidence conflicts, the Court is satisfied a jury could have reasonably determined Dupont's film did not constitute an acceptable noninfringing alternative. Plaintiff put on sufficient evidence showing the price-point for DuPont was notably higher than the price of Kaneka and SKPI film, DuPont's sales were limited to a single customer that was affiliated with DuPont, and questions surround the availability of DuPont's films regarding Samsung and

LG films. As a consequence, Defendants have not met their burden regarding Dupont's polyimide films.

b. Taimide's Film

Defendants postulate Taimide's film could serve as an acceptable noninfringing substitute; however, they do no work to prove this point other than by stating summarily "Taimide's film was also used in Samsung and LG phones during the damages period, establishing that Taimide's film was an acceptable alternative." (JMOL at 27.) Likely, this conclusory statement is based on Defendants' incorrect assumption that Plaintiff must prove Taimide is not acceptable, instead of Defendants proving Taimide is acceptable. The Court does not find this conclusory statement sufficient to meet Defendants' burden.

c. SKPI's Film

Likewise, Defendants assert SKPI sold other, non-accused films to Innova and Hanwha during the '961 Patent damages period which may be acceptable for Samsung and LG phones. (JMOL at 27, citing Trial Transcript, November 10, 2015, p.m. at 97:6-19; Dkt. 511, at 17; Trial Transcript, November 12, 2015, p.m. at 28:1-5.) However, as Plaintiff points out, Defendants have previously attempted to label some of its films as noninfringing based on the fact that certain samples of its films were not tested or proven to infringe. (JMOL Opposition at 2.) But "[i]t is immaterial that certain samples of Defendants' products either were not tested or were not found to infringe, because for each accused product, at least one sample *representative* of that product was found to infringe." Kaneka Corp. v. SKC Kolon PI, Inc., 198 F. Supp. 3d 1089, 1102 (C.D. Cal. 2016) (emphasis in original). Plaintiff has submitted evidence showing Defendants "IF," "LN," and "LV" films infringe the '961 Patent. (Trial Transcript, November 12, 2015, a.m. at 67:0-73:14; Dkt Nos. 750-19, 750-20.) Additionally, Plaintiff argues Defendants have no evidence any other types of SKPI films can be used in "3L FCCL and coverlay applications, [and] no evidence such films would even be acceptable to Hanwha and Innova." (JMOL Opposition at 24.) Defendants have the burden of proving their non-accused films could have served as acceptable noninfringing films. They have put forward no evidence countering Plaintiff's argument that they are labeling their products as noninfringing only because certain samples were not tested or not found to infringe. Additionally, Defendants have admitted its other product types are not adequate substitutes for its IF, LN, or LV polyimide films. (DKt No. 755-16 at 0015.) Once again, Defendants' conclusory assertions are insufficient to carry its burden, therefore the Court finds Plaintiff has demonstrated an absence of acceptable alternatives.

3. Kaneka's Manufacturing and Marketing Capability

Defendants do not dispute this prong, so the Court will not address this issue.

4. Amount of Profit Kaneka Would Have Made

Defendants argue Kaneka's damages calculation is too speculative. (JMOL at 30.) The Court disagrees. The testimony of Mr. Napper provides amply sufficient evidence for the jury to quantify Kaneka's lost profits. As noted above, the Court already found Mr. Napper's testimony rested on reliable and sound evidence. (Dkt. No. 643 at 7.) In order to calculate Kaneka's lost profits arising from SKPI's inducement of direct infringement in the United States, Mr. Napper began with taking the total volume of SKPI's sales of the accused films and subtracting accused films where Kaneka did not have a competing product. This number came out to 130 million m². (Trial Transcript, November 10, 2015, p.m. at 59:2-17, 67:6-10.) Of that number, 96 million m² were sold in Korea. (*Id.*) Mr. Napper then narrowed down sales in Korea to sales to Hanwha and Innox, bringing the total volume to 73 million m². (*Id.*) Mr. Napper then discovered 5-10% of film product may be shipped outside of the Korean supply chain and would not ultimately end up at Samsung or LG. (*Id.*) Consequently, he reduced the total volume by 7.5% to account for "leakage." (*Id.*) Then Mr. Napper discovered, through SKPI's own estimates, only about 70-90% of polyimide film ends up in cellphones, thus he used 75% as a reasonable estimate as to how much film actually ends up in Samsung and LG phones. (*Id.*) After adjusting for leakage and for cellphone usage, Mr. Napper estimated roughly 50 million m² of SKPI film went through the Korean supply chain. (*Id.*) Mr. Napper then noted Bloomberg IDC had estimated 15-24% of Samsung and LG phones would be sold in the United States, and additionally, SKPI had itself estimated 20% of Samsung and LG phones would be sold in the United States. (*Id.*)¹⁴ Consequently, he believed it to be reasonable to look at Kaneka's damages for 20% of 50 million m², or approximately 9 million m² of film. Considering that an expert is entitled to estimate the extent of infringing use in the United States where the actual data is unavailable, see *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 856 (Fed. Cir. 2010), the Court finds Mr. Napper's calculus to be a reasonable estimation of Kaneka's lost profits and the jury had sufficient evidence to support their determination of damages.

5. Presumption against Extraterritoriality

Though not part of the *Panduit* test, Defendants' last argument contends that Kaneka's theory of lost profits violates the presumption against extraterritoriality because it "is impermissibly based on activities and market conditions in Korea, not the U.S." (JMOL at 32.) Notably, 35 U.S.C. § 271 contains several provisions relating to extraterritoriality in the realm of infringement. Specifically, 35 U.S.C. § 271(a) is limited to acts "within the United States" or imports "into the United States." Likewise, 35 U.S.C. § 271(f) provides liability for whoever illegally "supplies or causes to be supplied in or from the United States" portions of a patented invention. Here, however, 35 U.S.C. § 271(b) is the operative statute, which states in full: "Whoever actively induces infringement of a patent shall be liable as an infringer." The territorial limits in place in many of the other subsections of this statute are conspicuously absent in § 271(b), and Defendants have submitted no authority supporting the proposition that the

¹⁴ Defendants dispute the range 15-24% range Mr. Napper relies on, however, considering the range perfectly meshes with Defendants' own estimation, their argument is unavailing.

territorial limits should be read into § 271(b). Moreover, the authority Defendants do rely on is easily distinguishable from this case. Defendants place a heavy emphasis on Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc., 711 F.3d 1348, 1372 (Fed. Cir. 2013). However, there the Federal Circuit concluded the district court correctly withheld damages which were “not rooted in Fairchild’s activity in the United States.” Here, however, Mr. Napper’s entire damages analysis centers on pinpointing how much of Defendants’ infringing activity took place within the United States. Defendants’ argument here is not persuasive.

In conclusion, each of Defendants’ arguments have failed to meet its burden of proof. Accordingly, the Court DENIES Defendants’ Motion for Judgment as a Matter of Law. Furthermore, the Court DENIES Defendants’ Provisional Motion Pursuant to Rule 52 as moot since it relied upon the Court first granting Defendants’ JMOL.

III. PERMANENT INJUNCTION

Plaintiff filed its MPI on July 10, 2017. (Dkt. No. 757.) Defendants filed their Opposition on July 17, 2017. (MPI Opposition, Dkt. No. 758.) Plaintiff filed its Reply on July 24, 2017. (MPI Reply, Dkt. No. 762.) Plaintiff seeks an injunction prohibiting SKPI from directly infringing and inducing infringement of the ‘961 Patent in the United States, and also includes requirements irrespective of location that are designed to prevent infringement in the United States. (MPI at 2.) Plaintiff asks the injunction include a prohibition on “manufacture, use, offer to sell and sale of Infringing Products ultimately destined for the United States.” (Id. at 3.) Plaintiff additionally requests SKPI be required to provide notice to its customers, through markings on the infringing products and on sales and advertising materials related to the infringing products, that the films are not available “for sale or use in, or delivery into the United States, or for use in products sold, offered for sale, or used in the United States, or products delivered to or imported into the United States.” (Id.)

A. Legal Standard

“A permanent injunction is an extraordinary remedy that may only be awarded upon a clear showing that the moving party is entitled to such relief.” Server Tech., Inc. v. Am. Power Conversion Corp., 2017 WL 2181101, at *3 (D. Nev. May 12, 2017) (citing Mazurek v. Armstrong, 520 U.S. 968, 972 (1997) (per curiam)); see also Monsanto Co. v. Geertson Seed Farms, 561 U.S. 139, 165 (2010). To receive a permanent injunction after a finding of infringement, the moving party must satisfy a four-factor test: (1) it has suffered irreparable harm; (2) monetary damages are inadequate; (3) the balance of hardships is in the patent holder’s favor; and (4) that the public interest would not be disserved by a permanent injunction. eBay, Inc. v. MercExchange, LLC, 547 U.S. 388, 391 (2006); see also Server Tech., 2017 WL at *3. “The decision to grant or deny permanent injunctive relief is an act of equitable discretion by the district court, reviewable on appeal for abuse of discretion.” eBay, 547 U.S. at 391.

B. Irreparable Injury

Kaneka argues, incorrectly, that “the analysis should proceed with an eye to the long tradition of equity practice granting injunctive relief upon a finding of infringement in the vast majority of patent cases.” (MPI at 4, citing Presidio Components, 702 F.3d at 1362–63.) This standard, however, is incorrect. The Federal Circuit has walked back this line of thinking, unambiguously stating there is no longer a presumption of irreparable harm upon a finding of patent infringement. Robert Bosch LLC v. Pylon Mfg. Corp., 659 F.3d 1142, 1148–49 (Fed. Cir. 2011). To meet this factor, the moving party must establish that (1) absent an injunction, it will suffer irreparable harm, and (2) that a sufficiently strong causal nexus relates the alleged harm to the alleged infringement. Apple Inc. v. Samsung Elecs. Co., 735 F.3d 1352, 1359 (Fed. Cir. 2013). Kaneka makes several arguments in support of this factor:

- (1) Both Kaneka and SKPI practice the patented invention, though Kaneka owns the patent rights.
- (2) Kaneka and SKPI are direct competitors in the same market, a fact which strongly favors a finding of irreparable harm. Presidio Components, 702 F.3d at 1365.
- (3) Kaneka does not license its patents to competitors.
- (4) SKPI’s continued infringement will cause Kaneka further loss of revenue.
- (5) SKPI’s infringement has eroded Kaneka’s market share for its polyimide films, another fact which favors a finding of irreparable harm. ifi, 598 F.3d at 861–62.
- (6) SKPI is a foreign corporation with no known assets in the United States. Cordelia Lighting, Inc. v. Zhejiang Yankon Grp. Co., 2015 WL 12656241, at *9 (C.D. Cal. Apr. 27, 2015).
- (7) Kaneka’s ‘961 Patent provided dimensional stability crucial to the growth of the smartphone industry, thereby establishing a causal nexus between the infringement and the harm.

(MPI at 4–10.)

In opposition, Defendants make two arguments. They primarily contend Kaneka has failed to establish a nexus between the alleged harm and future infringement of the ‘961 Patent. However, Defendants additionally argue they have ceased the activities the jury found to be infringing, and have since created a new, non-infringing product. (MPI Opposition at 12–13; Declaration of Jeong Yeul Choi, Dkt. No. 758-1, ¶ 11; 758-7, at Ex. 2, Ex. 4.) Defendants note they have filed a currently pending declaratory judgment action seeking a declaration that their redesigned products do not infringe on Kaneka’s patents. (MPI Opposition at 13; see also SKC Kolon PI, Inc. v. Kaneka Corp. Case No. 2:16-cv-05948-AG (AJW) (C.D. Cal. 2016) “SKC Kolon”). Thus, Defendants appropriately wonder why this Court should enter a permanent injunction when the legality of SKPI’s current activities have yet to be decided. Defendants cite two cases for the proposition that permanent injunctions should not be issued when the defendants have stopped selling infringing units, Accentra Inc. v. Staples Inc., 851 F. Supp. 2d 1205, (C.D. Cal. 2011), aff’d in part, rev’d in part, 500 F. App’x 922 (Fed. Cir. 2013) and KFx Med. Corp. v. Arthrex Inc., 2014 WL 11961953 (S.D. Cal. Feb. 18, 2014).

The Court finds Defendants' position convincing. Plaintiff attempts to distinguish Accentra and KFx by noting the patent holder in those cases agreed the redesigned products no longer infringed. (MPI Reply at 6–7.) In contrast, Plaintiff here contends Defendants' redesigned products still infringe its patents. This difference is not persuasive. Plaintiff fails to establish irreparable harm if Defendants are no longer infringing. Whether Defendants continue to infringe depends upon the outcome of a case not before this Court. Consequently, issuing a permanent injunction now, while that case is pending, is premature, and risks venturing into the jurisdiction of another court. Because Plaintiff have not made an adequate showing of irreparable harm, the Court DENIES its Motion for a Permanent Injunction.

IV. APPLICATION TO TAX COSTS

Both parties have asked the Court to examine the Clerk's accounting of the Bill of Costs. (Dkt. Nos. 765, 767.) The Court does so below. Unsurprisingly, Defendants argue the Clerk awarded Plaintiff too much in costs, while Plaintiff argues the Clerk did not award enough.

A. Legal Standard

Rule 54 provides that “unless a federal statute, these rules, or a court order provides otherwise, costs—other than attorney's fees—should be allowed to the prevailing party.” Fed. R. Civ. P. 54(d)(1). “The rule creates a strong presumption in favor of awarding costs to a prevailing party, but vests in the district court discretion to refuse to award costs.” Interstate Fire v. Pacific Emp'r Ins. Co., No. EDCV 06-00593 VAP (OPX), 2009 WL 4708360, at *1 (C.D. Cal. Dec. 9, 2009) (citing Ass'n of Mexican–American Educators v. State of California, 231 F.3d 572, 591 (9th Cir. 2000)). Taxable costs are defined as and limited to the following:

1. Fees of the clerk and marshal;
2. Fees for printed or electronically recorded transcripts necessarily obtained for use in the case;
3. Fees and disbursements for printing and witnesses;
4. Fees for exemplification and the costs of making copies of any materials where the copies are necessarily obtained for use in the case;
5. Docket fees under section 1923 of this title; and
6. Compensation of court appointed experts, compensation of interpreters, and salaries, fees, expenses, and costs of special interpretation services under Section 1828 of [28 U.S.C.].

28 U.S.C. § 1920.

The scope of taxable costs under § 1920 is “narrow,” “limited” and “modest.” Taniguchi v. Kan Pac. Saipan Ltd., 132 S.Ct. 1997, 2006 (2012) (holding “interpreters” under paragraph (6) of section 1920 does not apply to “translators of written materials”). Central District of California Local Rule 54 sets forth the taxable costs allowed under 28 U.S.C. § 1920

within the Central District of California. Memory Lane, Inc. v. Classmates Int'l, Inc., No. SACV11940JLSRNBX, 2014 WL 12617383, at *1 (C.D. Cal. July 25, 2014). Either party may seek review by the court of the Clerk's taxation of costs. Fed. R. Civ. P. 54(d)(1); L.R. 54-8. "That review will be limited to the record made before the Clerk, and [will] encompass only those items specifically identified in the motion." L.R. 54-8.

B. Discussion

Plaintiff applied for taxation of costs in the amount of \$473,298.55 on June 7, 2017. ("Application," Dkt. No. 742.) Defendants objected on June 14, 2017, arguing Plaintiff should only receive \$109,245.81, assuming they are entitled to costs at all. ("Application Opposition," Dkt. No. 744, at 13.) Plaintiff responded on June 19, 2017. ("Application Response," Dkt. No. 746.) The Clerk filed a bill of costs awarding Plaintiff \$237,607.24 on August 15, 2017. ("Bill," Dkt. No. 764.) Defendants then asked the Court to review the Bill. ("Bill Motion," Dkt. No. 765.) Plaintiff also sought review of the Bill, though for different reasons. ("Bill Opposition," Dkt. No. 767.)

1. Reporter's Transcript Fees

Plaintiff sought to recover \$8,319.90 in Court reporter transcript fees. (Application at 1.) The Clerk reduced this amount to \$0. (Bill at 1.) Reporter transcript fees are addressed in Local Rule 54-3.4, which states the prevailing party may recover "[t]he cost of the original and one copy of all or any part of a trial transcript, a daily transcript, or a transcript of matters occurring before or after trial, if requested by the Court or prepared pursuant to stipulation." Here, as the Clerk noted on the Bill, the Court did not request a transcript, nor were the transcripts prepared pursuant to stipulation. (Bill at 1.) Consequently, the Court affirms the Clerk's taxation of reporter's transcript fees and awards Plaintiff \$0.

2. Depositions

Plaintiff sought to recover \$55,824.24 for the cost of conducting depositions. (Application at 1.) Defendants objected to this amount, arguing Plaintiff included in its calculation the cost of expedited transcripts, and not the allowed cost of non-expedited transcripts. (Application Opposition at 9.) Indeed, the prevailing party is only entitled to recover "[t]he cost of the original and one copy of the transcription of the oral portion of all depositions used for any purpose in connection with the case, including *non-expedited transcripts*." L.R. 54-3.5(a) (emphasis added). Seeing its error, Plaintiff adjusted its calculation, instead requesting costs of \$29,142.34. (Application Response at 9.) The Clerk inadvertently failed to decrease the total award. Plaintiff may properly recover \$29,142.34 for depositions, not the \$55,824.24 Plaintiff originally sought.

As an aside, Defendants argue Kaneka's awards be reduced by 60%, considering Kaneka "prevail[ed]" only on two of the five originally asserted patents." (Bill Motion, at 4.) Defendants

offer no authority supporting this apportionment of costs, and the Court knows of none. The Court thus declines Defendants' invitation to calculate costs in this manner.

3. Witness Fees

Plaintiff sought to recover \$27,473.59 for the cost of witness fees. (Application at 1.) The Clerk reduced this amount to \$12,638.85. (Bill at 1.) The prevailing party may recover statutory witness fees, including "per diem, mileage, subsistence, and attendance fees . . . paid to witnesses subpoenaed or actually attending the proceeding." L.R. 54-3.6(a). It appears that Plaintiff's application included the cost of subsistence for witnesses even on days where they were not testifying. Plaintiff would have a witness testify on two days of the trial, but keep them in a hotel for two weeks or more. Thus, the Clerk struck the witness costs incurred after they testified. The Court disagrees with the Clerk's decision. Sometimes witnesses need to be recalled and reexamined, and it is not immediately obvious to counsel which witnesses will need to be recalled or when. Thus, it is reasonable to hold witnesses in town longer than just the days they are scheduled to testify. Consequently, the Court awards Plaintiff \$27,473.59 in witness fees.

4. Interpreter and Translator Fees

Plaintiff requested \$225,334.19 in interpreter's fees. (Application at 1.) The Clerk reduced the amount because Plaintiff had included the cost of the interpreter's travel time, subsistence, and meals in this figure. According to the Local Rules, the prevailing party may recover "[f]ees paid to interpreters and translators, including the salaries, fees, expenses, and costs incurred for oral translations." L.R. 54-3.7. The Court disagrees with the Clerk's reduction. Meal costs, subsistence costs, and travel time costs are not so attenuated from the "costs incurred for oral translations" as to preclude awarding. Thus, the Court awards Plaintiff \$225,334.19 in interpreter and translator fees.

5. Certification, Exemplification, and Reproduction of Documents

Plaintiff requested \$154,562.63 for the cost of producing exhibits for trial and for discovery. (Application at 1.) The Clerk reduced this amount to \$0, noting reproduction costs for trial exhibits and discovery are not available pursuant to the Local Rules. (Bill at 1.) Those rules state the prevailing party may recover "[d]ocument preparation costs, including: (a) The cost of copies . . . of documents necessarily filed and served; [and] (b) [t]he cost of documents or other materials admitted into evidence when the original is not available or the copy is substituted for the original at the request of an opposing party." L.R. 54-3.10. Courts have recently been amenable to allowing the prevailing party to recover costs for trial exhibits and electronic discovery. See Dowd v. City of Los Angeles, 28 F. Supp. 3d 1019, 1049–50 (C.D. Cal. 2014) (awarding the prevailing party the cost of making copies for trial exhibit notebooks); Memory Lane, Inc. v. Classmates Int'l, Inc., No. SACV11940JLSRNBX, 2014 WL 12617383, at *1–2 (C.D. Cal. July 25, 2014) (awarding the prevailing party the cost of electronic discovery); see also One Unnamed Deputy Dist. Attorney v. Cty. of Los Angeles, No. CV 09-7931 JCG, 2013 WL 12140937, at *2 (C.D. Cal. Aug. 16, 2013); Tibble v. Edison Int'l, No. CV 07-5359 SVW AGRX,

2011 WL 3759927, at *7 (C.D. Cal. Aug. 22, 2011), aff'd, 520 F. App'x 499 (9th Cir. 2013). Contrary to the Clerk's Bill, the Court is satisfied that awarding costs for trial exhibits and electronic discovery are appropriate in this complex and arduous case. Thus, the Court awards Plaintiff \$154,562.63.

In sum, the Court finds it appropriate to grant Plaintiff \$350 in filing fees, \$1,434 for service of process, \$0 for reporter's transcript fees, \$29,142.34 for deposition fees, \$27,473.59 for witness fees, \$225,334.19 for interpreter's fees, and \$154,562.63 for the reproduction of documents. The Court therefore AWARDS Plaintiff \$438,296.75 in costs.

V. CONCLUSION

The Court DENIES Defendants' JMOL, finding they have not met their evidentiary burden. Accordingly, the Court DENIES Defendants' PM, as it necessarily assumed the Court would grant Defendants' JMOL. The Court also DENIES Plaintiff's MPI, finding they have failed to establish irreparable injury. Regarding the parties' dual Bill of Costs motions, the Court DENIES Defendants' DMTC, and GRANTS IN PART and DENIES IN PART Plaintiff's PMTC. The Court thus AWARDS Plaintiff \$438,296.75 in costs.

IT IS SO ORDERED.